



Issue 19  
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# ADVOCATE

## Face and Focus of Technology Park Changing Rapidly

A lot of activity is taking place at East Tennessee Technology Park (ETTP). Many buildings are coming down; others are being transferred to new owners. Land is being surveyed thoroughly for evidence of contamination. Sites of historical significance are being evaluated for preservation or at least recognition of their prior existence.

Other small actions are removal of the K-725 Beryllium Building slab and the K-710 sewage treatment plant. Caswell said those projects shouldn't take long to complete, but work must be finished on K-770 first because it surrounds the K-725 area.

The major work to be completed is the characterization of the bulk of the Zone 1 acreage. Caswell said the five designated sites just mentioned represent only about 100 acres. Zone 1 comprises a 1,400-acre site, which must be characterized so it can be cleared for unrestricted industrial use. He said multiple crews are working in the area performing radiological surveys, taking samples, and preparing risk assessments.



### IN THIS ISSUE

Recommendations .....	3
Augusta Chairs Meeting .	4
Waste Workshop .....	5
Haul Road Tour .....	5
Member News .....	6
Reservation News .....	7

The *Advocate* is a publication of the Oak Ridge Site Specific Advisory Board (ORSSAB)—an independent, nonpartisan, volunteer citizens panel providing recommendations and advice to DOE's Environmental Management Program

In Zone 1 at ETTP, which comprises all of the area outside of the main security fence (see graphic on page 2), five sites have been identified for remediation. Cleanup of one of those sites, Blair Quarry, was finished this spring.

Work on the K-770 Scrap and Debris site has been underway for about a year and is nearing completion. Peter Caswell of Bechtel Jacobs, Co., is the characterization leader for Zones 1 and 2. He said about 18,000 tons of scrap from that site has been sent to the Environmental Management Waste Management Facility (EMWMF) for disposal.

Caswell said the K-895 Cylinder Destruct Area is scheduled for work this summer. He said it's a small area that will only involve removal of a couple of truck loads of contaminated soil to EMWMF.

Once all the information is gathered it will be reviewed by EPA and the Tennessee Department of Environment and Conservation to ensure that no further actions are necessary.

"We have to demonstrate protectiveness to the worker or the groundwater or we have to take an action," said Caswell. "The characterization represents some uncertainty because there are sites we may or may not have to take actions on. We're putting a lot of resources in the characterization because we must know if we need to get it scheduled for remediation to have it finished by 2007." Work is scheduled for completion in 2008, but Caswell believes work in Zone 1 should be finished in 2007.

*continued on page 2*

## The Changing Face of ETTP *continued from page 1*

Most of the activity at ETTP is in Zone 2. Between now and 2008, when the work is due for completion, about 500 buildings will come down, according to Bill Cahill, who is the decontamination and decommissioning (D&D) and infrastructure reduction team leader for DOE.

The largest job is dismantling the huge K-25 building. Work there currently involves the removal of excess material and equipment and the exterior transite panels. Only the north end of the building will remain.

Cahill said active D&D is underway on about two dozen buildings that supported laboratory activities or infrastructure, such as the old cafeteria and laundry. Four buildings in that group have already been demolished.

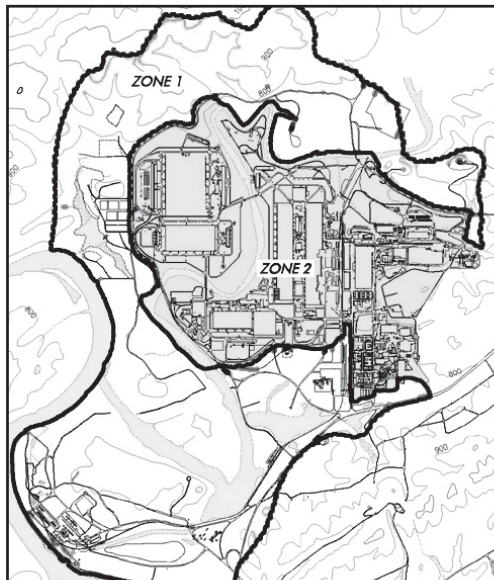
Another active D&D process is underway just north of the laboratory, known as the K-1008 buildings. This collection of about a dozen buildings includes the former fire station and the change house. Cahill said those buildings will be demolished in June or July.

Almost all of the debris from demolition will go to EMWMF. Some of the non-contaminated material will go to the waste disposal cell at Y-12.

Two waste disposal areas are on site in Zone 2. The 1070-B area will be remediated and any classified waste will be removed, according to Julie Pfeffer, project manager for Bechtel Jacobs. In the 1007-C/D burial ground, which contains classified waste, anything that is a threat to groundwater will be removed, otherwise waste will remain in place with security controls.

The reason for all this activity is so ETTP can be used for other purposes. The plan is to establish a private industrial park at ETTP once cleanup of the site is complete. Approximately

26 buildings at the site have been identified for transfer. These facilities are not contaminated, and they will either be marketed to the private sector or used to support operation of the industrial park. These facilities will not be demolished but instead will be transferred to the Community Reuse Organization of East Tennessee (CROET). Transfer of these facilities will save DOE money since the new owner will be responsible for the buildings' demolition.



Four office buildings, K-1007, K-1225, K-1330, and K-1580, are ready to be transferred to CROET, which will lease the buildings to Bechtel Jacobs. Once ETTP cleanup is done, the buildings will be leased to private businesses.

Work is underway to support transfer of additional buildings at ETTP. Sue Cange, DOE Team Leader, Reindustrialization and Technical Assistance Team, said approval has been received from the regional EPA administrator for a covenant deferral request for transfer of Buildings 1036 and 1400. She said that package has been sent to the governor for concurrence, and from there it will go to DOE Headquarters. Transfer of these buildings is expected by the end of the year.

She also said a third package is out for public review for transfer of Parcel ED-5 East, an area of about 19 acres.

Even though most of the K-25 building is coming down, its significance as part of the Manhattan Project will be preserved. A memorandum of agreement has been signed by DOE, the Tennessee State Historic Preservation Office, and the Advisory Council on Historic Preservation to develop an interpretive area on the building site when demolition is complete.

A central courtyard between the “legs” of the old building will be filled and graded, resulting in a 10-foot high area. The walls would be used to display plaques, photographs, and murals.

Cahill said work is being done to evaluate potential use of some of the equipment used in K-25 for historical preservation. He also said guard portal number 4 will likely be salvaged for historical purposes.

At some point a decision will be made concerning who will be responsible for managing the site, be it the National Park Service or if it will be transferred to some other organization.

With all the activity going on between now and closure in 2008, worker safety is a concern. Many people will be working on a number of different projects, so there will be a lot of coming and going. Caswell said logistical plans are being developed so that everything can be done efficiently and safely.

By the end of 2008, ETTP will be a very different place, with only a few of the original buildings remaining. If reindustrialization is successful, within a few years, ETTP will have a whole new look and mission.

# Recent Recommendations & Comments

Complete recommendation text can be found on the ORSSAB web site at [www.oakridge.doe.gov/em/ssab](http://www.oakridge.doe.gov/em/ssab).

## Proposed Plan for Upper East Fork Poplar Creek Contaminated Soils and Scrapyard

At its March meeting, the ORSSAB Environmental Management Committee heard a preview of the Proposed Plan for the Interim Actions for Contaminated Soils and Scrapyard in Upper East Fork Poplar Creek. The presentation was a practice session in preparation for the public meeting, which was held later that month.

The plan is to subdivide the Y-12 site into a number of geographical areas termed Exposure Units and evaluate cleanup based on the reasonably anticipated land use of the area.

The major source of contamination at the site was determined to be an aboveground scrapyard in the west end of the plant. The plan's preferred alternative recommends that the scrapyard and other lesser contamination sources be removed and two exposure units on the east end of Y-12 be remediated down to 10 feet, with the balance of the plant to be remediated to 2 feet. The other alternative was to take no action.

The Board questioned why only two alternatives were proposed when several had been considered. The Board recommended that an explanation be included as to how the decision was made to propose only two alternatives and that future proposed plans include more than two alternatives.

The recommendation also asked that a summary assessment be included in the plan related to cost estimate sensitivity to the following factors: (1) schedule

uncertainty, (2) mobilization and demobilization required to coordinate with infrastructure reduction and modernization activity, (3) availability of EMWMF, and (4) ability to meet Oak Ridge Reservation waste acceptance criteria for all waste lots.

The recommendation also included a number of specific questions from Board members and asked for clarification on each.

## Public Health Assessment of the Toxic Substances Control Act Incinerator

The public health assessment by the Agency for Toxic Substances and Disease Registry (ATSDR) on the Toxic Substances Control Act Incinerator (TSCAI) was first presented to the public on March 29. The Environmental Management Committee asked to have a similar presentation given at its April meeting.

ATSDR concluded that the TSCAI releases trace levels of contaminants into the environment, but in amounts far below levels associated with health effects and the permit issued to TSCAI by the state of Tennessee. In preparing the public health assessment, ATSDR observed that regional air quality in the Knoxville area is sometimes poor, not as a result from a single source but from industrial and mobile sources over a broad area.

The committee generally endorsed the report but had a number of comments and recommendations to be included in the final document. At its May meeting, the Board approved the committee's recommendations and forwarded them to ATSDR and DOE for consideration.

The Board recommended that factual accuracy, conclusions, and recommendations in the report should be reviewed against any new information from performance tests and risk assessments associated with ongoing permit renewal requirements.

It also recommended that continuous stack sampling for metals and continuous emission monitoring of particulate matter should be maintained using equipment already installed at the facility. The results should be used to provide continuing assurance of anticipated performance of emission controls.

The recommendation included several specific comments and suggested corrections to the report.



*Board member Ben Adams delivers a presentation to a Roane County High School class on May 5. To date, Board members have made 15 presentations to schools, groups and elected officials in FY 2005.*



# SSAB Chairs Hold Productive Meeting in Augusta

Twice yearly, the Chairs of the nine SSABs (also called Citizens Advisory Boards or CABs) from across the DOE complex meet to discuss Environmental Management (EM) Program projects and policy, share ideas and concerns among sites, and identify and work on common issues. The Spring 2005 meeting was hosted by the Savannah River Site CAB in Augusta, Georgia, on April 28 and 29.

up so that only elected officials can be voting members.

Gerald DePoorter, the Rocky Flats Chair, distributed correspondence the CAB had generated on the issue, plus a letter the CAB had received on April 26 from the Colorado Congressional delegation expressing support for a broader spectrum of membership on the Local Stakeholder Organization.

will even still be functioning. Melissa Nielson, who has recently been named the Acting Director of the DOE Office of Internal/External Coordination, assured Phillips that his CAB would be welcome at the next Chairs meeting.

Most of this discussion took place on Thursday, and on Friday morning, Jim Brannon from the Northern New Mexico CAB distributed a draft letter he and others had prepared Thursday evening in response to discussion. The letter recommends that the Secretary of Energy direct the offices where former EM sites will be transferred to develop CABs and that DOE develop a mechanism whereby the CABs, regardless of their affiliation within DOE, can continue to hold joint national meetings. The letter was unanimously endorsed by attendees, although several boards will have to take the letter before their memberships for formal approval.



*ORSSAB Chair Kerry Trammell, left, and member Norman Mulvenon at the EM SSAB Chairs meeting, held April 28–29 in Augusta, Georgia.*

One of the main topics at the meeting was that two of the CABs are facing extinction. The Rocky Flats CAB will shut down at the end of the site's regulatory closure, which will be sometime next year. (Physical closure of the site will take place by the end of 2005.) Members of the Fernald CAB reported that DOE will shutter their CAB in September 2005. That may not be the case, however, as Sandra Waisley from DOE said that she is sure the CAB is funded through FY 2006.

The Rocky Flats CAB is very concerned because the Local Stakeholder Organization that the DOE Office of Legacy Management has planned to put in place postclosure is currently set

DePoorter is now confident that DOE will change its stance on the issue and allow voting membership to persons other than elected officials. This will have important implications for other DOE sites transitioning to Legacy Management.

Several CABs may eventually be transitioning to other DOE programs, but one, the Nevada Test Site CAB, will transfer to the National Nuclear Security Administration by October. Several Chairs, particularly Charles Phillips from Nevada, expressed concern that once sites transition from EM to other DOE offices that communication between the Chairs will be lost, assuming that the CABs

## New Complex-Wide Waste Disposition Plan Unveiled

Frank Marcinowski, the DOE Deputy Assistant Secretary for Logistics and Waste Disposal Enhancements, reported that his office is preparing a new complex-wide waste disposition plan. A draft document containing proposals for low-level waste and mixed low-level waste streams will be coming out this summer. Other waste streams will be added to this "living document" as they are completed. Marcinowski invited the boards to comment on the draft, and he offered to hold a conference call with the Chairs to update them on his progress.

Marcinowski also noted that the New Mexico Environment Department may approve a permit modification for remote-handled waste at the Waste Isolation Pilot Plant in early 2006.

# Chairs Plan National Waste Disposition Workshop

As the DOE EM program moves toward accelerated cleanup and closure of its contaminated sites, the problem of waste disposition becomes increasingly urgent. Oak Ridge is shipping UF<sub>6</sub> cylinders to Ohio, low-level wastes to Nevada, mixed wastes to Utah, and transuranics to New Mexico. Idaho is sending wastes to Nevada, Washington, and New Mexico. Paducah is sending wastes to Oak Ridge and Nevada. And so it goes with every site in the DOE complex.

But what happens if one or more states decide they don't want any more wastes coming in? That's the issue in the Washington state courts right now following approval of Initiative 297 by voters there last fall. If the initiative stands, what will DOE do with the wastes scheduled to go there? Will other states retaliate against Washington, and if they do, where will it end?

The issue of waste disposition was addressed by the SSAB Chairs at their meetings in October 2004 and April 2005. The Chairs realized that while I-297 could bring major headaches to an already complex waste disposition puzzle, the system may be in trouble anyway from a variety of factors:

- Accelerated cleanup is outpacing solutions and creating problems.
- The capacity to treat wastes for which disposition is not yet defined is diminishing.
- The safety of the transportation system could be compromised by accelerated cleanup plans.
- Capacity issues at the Waste Isolation Pilot Plant and Yucca Mountain must be addressed.
- A need exists for storage of high-level waste and spent nuclear fuel if Yucca Mountain does not open.
- With no system-wide picture, it seems it's every site for itself.
- What is the backup plan if the current plans don't work out?

To help address the problem, the Chairs wrote to DOE in November to request that it sponsor a forum on the national waste disposition issue. DOE's response came in an April 22 letter from Paul Golan (who at the time was Principal Deputy Assistant Secretary for EM). Golan's letter states that while DOE shares the SSAB Chairs' goal of "achieving technically sound, fiscally responsible, politically acceptable, sustainable, and comprehensive solutions to DOE system-wide waste and material disposition challenges...a national workshop would not be the best use of EM's resources."

Undeterred, the Chairs agreed unanimously at their April meeting to send another recommendation to DOE, this time transmitting a more in-depth proposal developed by a subset of the Chairs over the preceding two months. Some of the SSABs have already signed off on the recommendation (including Oak Ridge), and approval from the remaining boards is expected by mid-June. Text of the recommendation is available on the ORSSAB web sites at [www.oakridge.doe.gov/em/ssab/Recommendations/FY2005/R5-9-05.5.pdf](http://www.oakridge.doe.gov/em/ssab/Recommendations/FY2005/R5-9-05.5.pdf).

## Members Tour Haul Road Route

In March Board members Dick Berry and Amy DeMint toured the haul road being built to transport waste from ETTP to EMWMF. Paul Clay and Joe Williams of Bechtel Jacobs led the tour of the road, which should be ready by the fall of 2005.



*Joe Williams (center) explains details of the haul road to ORSSAB members Dick Berry and Amy DeMint.*

The road begins at the north side of ETTP and runs parallel to Blair Road. A new bridge will be built to cross Highway 58 west of the Blair Road intersection. It uses an existing portion of Flanigan Loop Road to cross Pine

Ridge and then it turns east to run alongside West Bear Creek Road.

The route leaves West Bear Creek Road to go northeast and then runs parallel to a power line. A second bridge will be built across Bear Creek

to help protect the Tennessee dace, a small fish on the endangered species list, and a third bridge will cross Highway 95.

The road again mirrors a power line right of way to join the Closure and Post Closure Activities Haul Road, which runs from Y-12 to the EMWMF.

"I thought the haul road was a waste of money, given the dearth of traffic I see

on Bear Creek Road during the day, except during a shift change," said DeMint. "But there was an accident on Bear Creek the day after we toured, so perhaps it's not a bad idea after all."



# ORSSAB Welcomes New Member, Students...

In May DOE appointed Bob Olson to the Board and seated two new student representatives: Meredith James and



*Bob Olson and student representative Meredith James.*

Tonya Justice.

Bob Olson of Clinton is a retired nuclear engineer who has worked at the Savannah River Laboratory as an

experimental physicist and as a probabilistic risk analyst. He worked as a nuclear licensing engineer for Sargent and Lundy in Chicago. He worked as a consultant at the former K-25 plant, Y-12 National Security Complex, and Oak Ridge National Laboratory.

Bob is a member of the board of directors of Clinch River Home Health and is active in the Oak Ridge Institute for Continued Learning, where he is a trip planner and the moderator of the Philosophical Society.

Meredith James is a senior at Oak Ridge High School, where she serves as president of the Model UN club and Interact community service club.

She is a member of the National Honor Society and competes with the Oak Ridge High School Envirothon team. Her greatest love is teaching. Meredith has worked in a special education classroom for two years and works with special needs campers at Oak Ridge Children's Showcamp each summer. She plans a career in special education.

Tonya Justice is a junior at Anderson County High School, where she is a member of the National Honor Society and Fellowship of Christian Athletes. She plays basketball, softball, and runs cross-country for the school.

Tonya works with the local youth football program by helping with concessions and coaching a cheerleading team. After graduation, she plans to pursue a career in veterinary science.

## ...and Says Farewell to Retiring Students

The three ORSSAB students representatives for the term April 2004–April 2005 were honored for their service at the Board's April meeting. Stephanie Jernigan and Katie Meersman are seniors at Oak Ridge High School, and Zach Ludwig is a junior at Karns High School. DOE presented each student a plaque recognizing their work.

Zach has served as a member of the Karns Academic Team, the Future Business Leaders of America, and the Fellowship of Christian Athletes. Following graduation, he plans to attend college to pursue a career in psychiatry. "I never knew so much was invested in discussions about our environment just outside our doors," he said. "It's been very informative."

Stephanie is a member of the Oak Ridge High School orchestra as a

violinist. She plans to pursue a career in environmental or health care law after college. "It's given us a good understanding of how this whole process works," she said of her experience on the Board. "It's nice to know there are people on the ORSSAB who are pushing to get the Oak Ridge Reservation cleaned up."

Katie is a member the National Honor Society and the Key Club, and she attended a Model United Nations conference in Washington, D.C. Katie volunteers at Woodland Elementary School, the Oak Ridge Library Children's Room, and the Oak Ridge Children's Museum. She plans to study



*From left: Zach Ludwig, Katie Meersman, Stephanie Jernigan.*

political science or history in college and eventually wants to become a lawyer. "I'm grateful for being invited to come and participate in these meetings. It's one thing to sit in a science class; it's another to see the hard work that's being done and know how everything we're learning applies to the real world."

# Reservation News

## City Withdraws Tipping Fee Legislation

A bill introduced in the legislature that would have allowed the City of Oak Ridge to impose a so-called “tipping fee” on DOE-Oak Ridge Operations was withdrawn at the city’s request.

The fee would have allowed Oak Ridge to collect as much as \$5 million a year from DOE for storage and disposal of hazardous waste on the Oak Ridge Reservation. Anderson and Roane Counties each could have received as much as \$2 million a year as well.

In recommending withdrawal of the legislation, Oak Ridge Mayor David Bradshaw said significant progress had been made in discussions with DOE and its contractors to bring additional economic support to the city.

Negotiations are underway to adjust DOE’s payments-in-lieu-of-taxes for its presence on the reservation, as well as to have DOE pay for police patrols on certain DOE properties. DOE is expected to speed up the transfer to the city of about 270 acres of land considered prime property for residential development.

Opponents of the fee felt it might have hampered DOE’s cleanup operations on the reservation. There was also some question as to whether the bill would hold up in court if challenged because of previous rulings that local governments could not impose fees on the federal government.

## Incinerator Passes Two Emissions Test

TSCAI is in compliance with two different operating standards. Recent results from the Maximum Achievable Control Technology

(MACT) performance tests indicate the incinerator is operating within more stringent emission standards set by the Environmental Protection Agency.

The MACT standards include lower emission limits for organic compounds and metals and new requirements for operators. Tests were done in March.

The incinerator was also the subject of a public health assessment conducted by ATSDR (see Page 3).

The incinerator is the only one of its kind in the nation licensed to burn waste containing PCBs and radioactive wastes.

## Landfill Capacity Tripled

Work tripling the capacity of EMWMF was completed in April. The landfill, which holds radioactive wastes, now has four disposal cells with a capacity of 1.2 million cubic yards. The landfill may eventually be expanded to 1.7 million cubic yards.

Expanding the facility cost \$20 million. The work was done by Washington Earth Tech Disposal Cell, LLC, and took 20 months to complete.

## New Environmental Report Released

The report “Impacts on Oak Ridge Landowners of Off-Site Releases to the Environment from the Y-12 Plant and Associated Long-term Stewardship Issues” has been released for public review and comment.

The report explores impacts on property from environmental releases from the Y-12 plant, the use of the 400 parts-per-million cleanup level for mercury contamination, and the issue of long-term stewardship of contaminated lands.

## Study Says Discharges from Oak Ridge National Lab Not a Health Threat

A public health assessment by ATSDR concludes that radioactive discharges from Oak Ridge National Laboratory over the last 60 years have not been a health threat.

According to a statement in the report “people who have used or might continue to use the Clinch River and Watts Bar Reservoir for recreation, food, or drinking water may have been exposed to radiation. However, this radiation dose is well below levels associated with a health hazard.”

The report says radionuclides from the Oak Ridge Reservation that had been released into the Clinch River and Watts Bar Lake do not pose a health hazard to people who live near or use the waterways. It said radioactive contamination in the sediment, water, and fish was too low to cause observable health effects.

Copies of the report are available at the public libraries in Oak Ridge, Rockwood, Kingston, and Harriman, as well as the ATSDR Field Office at 197 S. Tulane Ave., in Oak Ridge. It’s also online at [www.atsdr.cdc.gov](http://www.atsdr.cdc.gov).

## Uranium Deposits to be Removed from K-25

This summer workers will begin removing uranium deposits from equipment and piping at Building K-25 at ETTP.

The uranium is left over from processes to convert it to uranium-235 for use in atomic weapons and fuel for nuclear submarines. The plant was shut down in 1987.

# Reservation News

*continued from page 7*

The job will be a bit risky because improper handling of the fissile material could cause an uncontrolled nuclear reaction. Security will no doubt be tight in transporting the highly enriched uranium for storage at Y-12 National Security Complex. The material could still be used to fashion an atomic weapon, so no one is saying just how much uranium will be extracted from the facility. At Y-12 the uranium will be “downblended” for use as reactor fuel.

Most of the equipment removed from K-25 will be shipped to the EMWMF, while some components will be sent for disposal at the Nevada Test Site.

The job is expected to take about two years. The K-25 structure must be dismantled by 2008, the date set for completion of cleanup work at ETTP.

## DOE Property Placed in Conservation Easement

Almost 3,000 acres of DOE property have been placed in a conservation easement to be managed by the Tennessee Wildlife Resources Agency.

The property is located in the western end of the Oak Ridge Reservation near ETTP. DOE will pay Wildlife Resources \$20,500 a year to manage the property, plus \$16,500 annually in in-kind services.

The area will be available for use by hikers and hunters. DOE will still patrol the property as well as handle fire control and forest management. The easement was developed as a way for DOE to help pay for damages to the lower Watts Bar Reservoir as a result of work done on the reservation.

The report is available at the Oak Ridge Public Library, the DOE Information Center, the Local Oversight Committee Office, and the ATSDR field office.

## Transfer of UF<sub>6</sub> Continues

More than 3,000 containers of uranium hexafluoride (UF<sub>6</sub>) have been shipped from ETTP to final disposition at Portsmouth, Ohio. Bechtel Jacobs, Co., DOE’s contractor for the project, said the last delivery should be in January 2006.

The steel containers have been stored outside for decades. Some have deteriorated badly and must be packed in another container for safe shipping.

The *Advocate* is a publication of the Oak Ridge Site Specific Advisory Board. To add your name to or remove it from our mailing list, to advise us of a change in address, or for additional copies of the *Advocate*, write us at the above address, or call the SSAB Support Office at (865) 576-1590. **Web address: [www.oakridge.doe.gov/em/ssab](http://www.oakridge.doe.gov/em/ssab)**

JOIN US FOR OUR  
JUNE MEETINGS

6/8, 6:00 p.m. Monthly Board Meeting  
The meeting presentation will feature a discussion of EM program coordination with NNSA and ORNL and an overview of criticality issues related to cleanup at the East Tennessee Technology Park.  
**Committee Meetings**  
6/15, 4:45 p.m. Board Process  
6/15, 5:30 p.m. Environmental Mgmt.  
6/21, 5:30 p.m. Stewardship  
6/23, 5:00 p.m. Board Finance  
6/23, 5:30 p.m. Executive  
6/28, 5:30 p.m. Public Outreach

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